



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/841,845	04/25/2001	Tadashi Ezaki	450100-03180	5834

20999 7590 08/09/2005

FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
----------

VENT, JAMIE J

ART UNIT	PAPER NUMBER
----------	--------------

2616

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/841,845

Applicant(s)

EZAKI, TADASHI

Examiner

Jamie Vent

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-45 rejected under 35 U.S.C. 102(b) as being unpatentable by Ezaki et al (US 5,822,425).

#### **[claims 1 & 9]**

In regard to Claims 1 and 9, Ezaki et al discloses a signal transmission method and apparatus for transmitting a signal including main information and various types of additional information added to said main information, comprising the steps of:

- detecting the type of additional information to be added (Figure 10b the decoder detects the time of additional information to be added as further described in Column 7 Lines 28-44);
- parameter associated with an error check code depending upon the detected type of the additional information (Column 5 Lines 50+ describes the parameter associated with an error check code that is detected type of additional information);
- generating an error check code on the basis of said selected parameter (Column 5 Lines 50+ describes generating an error check code on the basis of selected parameter); and

Art Unit: 2616

- inserting the additional information with said error check code into main information and transmitting a resultant signal (Column 5 Lines 50+ describes the end error code being inserted into the main information).

**[claims 2 & 10]**

In regard to Claims 2 and 10, Ezaki et al discloses a signal transmission method and apparatus wherein said main information is a vertical blanking interval (VBI) signal of a video signal (Figure 1 shows the VBI as further described in Column 1 Lines 34+ and Column 4 Lines 45-61).

**[claims 3 & 11]**

In regard to Claims 3 and 11, Ezaki et al discloses a signal transmission method and apparatus wherein said additional information added to the main information includes copy management information (Column 7 Lines 27+ describes the copy management information that is available in the system).

**[claims 4 & 12]**

In regard to Claims 4 and 12, Ezaki et al discloses a signal transmission method and apparatus wherein in said detection steps the type of additional information is detected on the basis of bit assignment within a predetermined bit range of the additional information (Column 6 Lines 50+ through Column 6 Lines 1-15 describes the detection of additional information that is detected on the basis of bit assignments through a predetermined bit range).

**[claims 5 & 13]**

Art Unit: 2616

In regard to Claims 5 and 13, Ezaki et al discloses a signal transmission method and apparatus wherein said error check code is a CRCC (Cyclic Redundancy Check Code) (Figure 2 shows the CRCC error check code which is further explained in Column 1 Lines 47-62).

**[claims 6 & 14]**

In regard to Claims 6 and 14, Ezaki et al discloses a signal transmission method and apparatus wherein when the additional information is of a predetermined type, said selection step selects a parameter which is common among two or more signal transmission methods (Column 7 Lines 27-43 describes the additional information that is added and furthermore since the selection parameters are available through the VBI which is common among various transmission methods and thereby meets the limitation)

**[claims 7 & 15]**

In regard to Claims 7 and 15, Ezaki et al discloses a signal transmission method and apparatus wherein said parameter associated with the error check code is an initial value used in the generation of the error check code (Figure 2 shows the error check code being a 6 bit CRCC code section wherein the initial value is used for the generation of an error as further described Column 5 Lines 50+).

**[claims 8 & 16]**

In regard to Claims 8 and 16, Ezaki et al discloses a signal transmission method and apparatus wherein said parameter associated with the error check code is a formula for generating the error check code or is a shift register configuration implementing said

formula (Column 6 Lines 15+ describes the transmission of the parameters associated with the error check code and the generation of the error check code by using the transmitted characters and comparing the codes to check the sum).

**[claims 17 & 25]**

In regard to Claims 17 and 25, Ezaki et al discloses a signal receiving method and apparatus for receiving main information including additional information with an error check code added to said main information, comprising the steps of:

- receiving a signal (Figure 10b shows the receiving of the signal);
- extracting additional information with an error check code from the received signal (Figure 10b shows the extraction of additional information from the demodulator to the error processing circuit as further described in Column 7 Lines 15-26);
- detecting the type of said additional information (Figure 10b the decoder detects the time of additional information to be added as further described in Column 7 Lines 28-44);
- selecting a parameter associated with the error check code depending upon the detected type of the additional information (Column 5 Lines 50+ describes generating an error check code on the basis of selected parameter); and
- checking the additional information using the error check code on the basis of said selected parameter (Column 6 Lines 15-43 describes the checking of the additional information using the error check code).

**[claims 18 & 26]**

In regard to Claims 18 and 26, Ezaki et al discloses a signal receiving method and apparatus wherein said main information is a vertical blanking interval (VBI) signal of a video signal (Figure 1 shows the VBI as further described in Column 1 Lines 34+ and Column 4 Lines 45-61).

**[claims 19 & 27]**

In regard to Claims 19 and 27, Ezaki et al discloses a signal receiving method and apparatus wherein said additional information added to the main information includes copy management information (Column 7 Lines 27+ describes the copy management information that is available in the system).

**[claims 20 & 28]**

In regard to Claims 20 and 28, Ezaki et al discloses a receiving method and apparatus wherein in said detection step, the type of the additional information is detected on the basis of bit assignment within a predetermined bit range of the additional information (Figure 4 shows the additional information and the CGMS which are included in the bit stream and thereby used for detecting the additional information and copy control information through the bit range as further described in Column 5 Lines 50+).

**[claims 21 & 29]**

In regard to Claims 21 and 29, Ezaki et al discloses a signal receiving method and apparatus wherein said error check code is a CRCC (Cyclic Redundancy Check Code) (Figure 2 shows the CRCC error check code which is further explained in Column 1 Lines 47-62).

Art Unit: 2616

**[claims 22 & 30]**

In regard to Claims 22 & 30, Ezaki et al discloses a signal receiving method and apparatus wherein when the additional information is of a predetermined type, said selection step selects a parameter which is common among two or more signal transmission methods (Column 7 Lines 27-43 describes the additional information that is added and furthermore since the selection parameters are available through the VBI which is common among various transmission methods and thereby meets the limitation).

**[claims 23 & 31]**

In regard to Claims 23 and 31, Ezaki et al discloses a signal receiving method and apparatus wherein said parameter associated with the error check code is an initial value used in generation of the error check code (Figure 2 shows the error check code being a 6 bit CRCC code section wherein the initial value is used for the generation of an error as further described Column 5 Lines 50+).

**[claims 24 & 32]**

In regard to Claims 24 and 32, Ezaki et al discloses a signal receiving method and apparatus wherein said parameter associated with the error check code is a formula for generating the error check code or is a shift register configuration implementing said formula (Figure 2 shows the error check code being a 6 bit CRCC code section wherein the initial value is used for the generation of an error as further described Column 5 Lines 50+).

**[claim 33]**



In regard to Claim 33, Ezaki et al discloses a VBI signal generating apparatus for vertical blanking interval (VBI) signal to be a video signal, comprising:

- timing detector for detecting the timing of inserting a VBI signal into the video signal (Figure 17 shows a line counter 85 which counts the number of horizontal synchronous signal is received and thereby allows for proper inserting of the VBI as further described in Column 12 Lines 60+ through Column 13 Lines 1-5);
- an error check code generator for generating an error check code for additional information added to the VBI signal (Column 7 Lines 50+ describes the error check code generator that is used to generate an error check code); and
- a VBI signal generator for generating, in response to timing detected with said timing detector, a VBI signal including additional information with an error check code, wherein said error check code generator switches a parameter used in generation of the error check code depending upon the type of the additional information (Column 13 Lines 1-31 describes the generation of the gate pulse which corresponds to the horizontal synchronous signal and thereby generates the error check code).

**[claim 34]**

In regard to Claim 34, Ezaki et al discloses a video signal transmitting apparatus as previously disclosed in Claim 33 with the additional limitations:

- a replacing unit for, in response to a timing detected by said timing detector, inserting the generated VBI signal into a video signal (Column 14 Lines 30-43 describes the replacing unit for inserting the VBI signal which was generated); and
- a signal distributing unit for distributing the video signal including the VBI signal inserted therein, wherein said error check code generator switches a parameter used in generation of the error check code depending upon the type of the additional information (Column 13 Lines 44-54 describes the distributing of a signal wherein the VBI is inserted).

**[claim 35]**

In regard to Claim 35, Ezaki et al discloses a video signal processing apparatus for processing a video signal as disclosed in Claim 34, with the additional limitations:

- a processing unit for processing the video signal, wherein said error check code generator switches a parameter used in generation of the error check code depending upon the type of the additional information (Column 5 Lines 50+ describes the parameter associated with an error check code that is detected type of additional information).

**[claims 36 & 37]**

In regard to Claims 36 and 37, Ezaki et al discloses a video signal receiving apparatus for receiving a video signal including additional information with an error detection, comprising:

- a receiving unit for receiving the video signal (Figure 10b shows the receiving of the signal);
- a timing detector for detecting the timing of extracting the additional information from the video signal (Figure 17 shows a line counter 85 which counts the number of horizontal synchronous signal is received and thereby allows for proper inserting of the VBI as further described in Column 12 Lines 60+ through Column 13 Lines 1-5);
- an extraction unit for, in response to the timing detected by said timing detector, extracting the additional information from the video signal (Figure 10b shows the extraction of additional information from the demodulator to the error processing circuit as further described in Column 7 Lines 15-26);
- an error checking unit for checking the additional information using the error check code included in the additional information (Column 7 Lines 50+ describes the error check code generator that is used to generate an error check code); and;
- a decoding unit for decoding the additional information depending upon the result of error checking (Figure 18 describes a decoding unit as further described in Column 13 Lines 33-44); and
- a display unit for displaying the video signal on a screen in accordance with the additional information (Figure 15 shows the output of the stream to a display unit which has been processes with additional information).

**[claim 38]**

Art Unit: 2616

In regard to Claim 38, Ezaki et al discloses a video signal processing apparatus for processing a video signal including additional information with an error check code, comprising:

- an input unit for inputting a video signal (Figure 15 shows an input for inputting video);
- a timing detector for detecting the timing of extracting the additional information from the video signal (Figure 17 shows a line counter 85 which counts the number of horizontal synchronous signal is received and thereby allows for proper inserting of the VBI as further described in Column 12 Lines 60+ through Column 13 Lines 1-5);
- an extraction unit for, in response to the timing detected by said timing detectors extracting the additional information from the video signal (Figure 10b shows the extraction of additional information from the demodulator to the error processing circuit as further described in Column 7 Lines 15-26);
- an error checking unit for checking the additional information using the error check code included in the additional information (Column 7 Lines 50+ describes the error check code generator that is used to generate an error check code);
- a decoding unit for decoding the additional information depending upon the result of error checking (Figure 18 describes a decoding unit as further described in Column 13 Lines 33-44); and

- a processing unit for processing the video signal in accordance with the additional information, wherein said error checking unit switches a parameter used in the error checking depending upon the type of the additional information (Column 18 shows a processing unit for processing the video signal wherein the error checking unit switches the type of additional information as it is sent back to the register).

**[claim 39]**

In regard to Claim 39, Ezaki et al discloses a recording medium for recording a video signal, wherein said video signal includes a VBI signal inserted therein, said VBI signal including additional information with an error check code generated by applying a parameter depending upon the type of said additional information (Column 13 Lines 1-31 describes the generation of the gate pulse which corresponds to the horizontal synchronous signal and thereby generates the error check code)..

**[claim 40]**

In regard to Claim 40, Ezaki et al discloses a recording medium wherein said additional information includes copy management information (Column 7 Lines 27+ describes the copy management information that is available in the system).

**[claim 41]**

In regard to Claim 41, Ezaki et al discloses a recording medium wherein the type of additional information is determined on the basis of bit assignment within a predetermined bit range of the additional information (Column 6 Lines 50+ through

Column 6 Lines 1-15 describes the detection of additional information that is detected on the basis of bit assignments through a predetermined bit range).

**[claim 42]**

In regard to Claim 42, Ezaki et al discloses a recording medium wherein said error check code is a CRCC (Cyclic Redundancy Check Code) (Figure 2 shows the CRCC error check code which is further explained in Column 1 Lines 47-62).

**[claim 43]**

In regard to Claim 43, Ezaki et al discloses a recording medium wherein information is of a predetermined type, the error check code is generated by applying a parameter which is common among two or more signal transmission methods (Column 7 Lines 27-43 describes the additional information that is added and furthermore since the selection parameters are available through the VBI which is common among various transmission methods and thereby meets the limitation).

**[claim 44]**

In regard to Claim 44, Ezaki et al discloses a recording medium wherein said parameter associated with the error check code is an initial value used in the generation of the error check code (Figure 2 shows the error check code being a 6 bit CRCC code section wherein the initial value is used for the generation of an error as further described Column 5 Lines 50+).

**[claim 45]**

In regard to Claim 45, Ezaki et al discloses a recording medium wherein said parameter associated with the error check code is a formula for generating the error check code or

Art Unit: 2616

is a shift register configuration implementing said formula (Figure 2 shows the error check code being a 6 bit CRCC code section wherein the initial value is used for the generation of an error as further described Column 5 Lines 50+).

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yamada et al (US 6750917).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 571-272-7384.

The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. Effective July 15, 2005, the Central Fax Number will change to 571-273-8300. Faxes sent to the old number (703-872-9306) will be routed to the new number until September 15, 2005.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/841,845

Page 15

Art Unit: 2616



Jamie Vent  
07/21/05



James J. Groody  
Supervisory Patent Examiner  
Art Unit 262 2616